

a processor, processing said image to determine a moving shadow in the image, and to determine three-dimensional information about the scene represented by the image, based on said information in said moving shadow.

37. An apparatus as in claim 36, wherein said processor carries out an operation to determine information in two orthogonal shadow planes, and determining a position of a light source automatically from said information in said two orthogonal shadow planes.

38. An apparatus as in claim 36, further comprising a memory, associated with said processor, storing information obtained from camera calibration.

39. An apparatus as in claim 38, wherein said information stored in said memory comprises ground plane information.

40. An apparatus as in claim 38, wherein said memory also stores information indicative of a length of a device used to produce said moving shadow.

41. An apparatus as in claim 38, wherein said memory also

stores information about a profile of brightness intensity.

42. An apparatus as in claim 38, wherein said memory also stores information about a threshold of brightness intensity.

43. An apparatus as in claim 38, wherein said memory stores information about a location of a light source.

44. An apparatus as in claim 38, wherein said memory does not store information about a location of the light source, and wherein said processor carries out an operation to determine information about shadows in two orthogonal shadow planes.

45. An apparatus as in claim 42, wherein said processor processes only pixels of the image which have intensity values greater than said specified threshold.

46. An apparatus as in claim 38, wherein said processor uses said information in the memory to transform between an image plane of said camera and and actual plane comprising the three-dimensional scene.

47. A medium, including instructions in machine readable

form, which, when executed by a machine, including instructions to:

detect a movement of the shadow in a a sequence of two-dimensional images, across the three-dimensional scene; and

use calibration information to determine information about the actual plane of the three-dimensional scene based on the transformation between the image plane of the device acquiring the two-dimensional image, and the three-dimensional scene.

48. A medium as in claim 47, wherein said instructions include instructions to determine information in two orthogonal shadow planes, and to determine a position of a light source automatically from said information in said two orthogonal shadow planes.

49. A medium as in claim 47, wherein said instructions include instructions to automatically determine a position of the light source from the information in said image.

50. A medium as in claim 47, wherein said calibration information includes information indicative of a position of a ground plane.